AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently Amended) A method for producing a transistor structure with a lightly doped drain (LDD), the method comprising:

structuring a gate electrode on a gate dielectric, the gate dielectric being on a substantially planar upper surface of a semiconductor body or substrate;

etching the semiconductor body or substrate to form sloping sidewalls on regions adjacent to the gate electrode, the sloping sidewalls sloping downward from the gate electrode;

depositing a spacer layer over at least part of the sloping sidewalls and the gate electrode;

anisotropically back-etching the spacer layer to form spacers, the spacers at least partially covering source-side and drain-side sidewalls of the gate electrode and the sloping sidewalls;

using the gate electrode as a mask, implanting dopant in the semiconductor body or substrate to form a source region, a drain region, and regions of lower dopant concentration, the regions of lower dopant concentration being adjacent to the source and drain regions and adjacent to a channel between the source and drain regions;

wherein implanting dopant is performed at a first angle relative to the upper surface of the semiconductor body or substrate to form the source and drain regions, wherein implanting dopant at a first angle is performed after formation of the spacers; and

wherein implanting dopant is performed at a second angle relative to the upper surface of the semiconductor body or substrate, and through the spacers, to form the regions of lower dopant concentration, the first angle being greater than the second angle.

2. (Previously Presented) The method of claim 1, wherein the sloping sidewalls are formed at angles of 30° to 60° from the upper surface of the semiconductor body or substrate.

3. (Previously Presented) The method of claim 2, wherein the sloping sidewalls are formed at angles of 45° from the upper surface of the semiconductor body or substrate.

4. (Currently Amended) The method of claim 1, wherein implanting ~~to form the regions of lower dopant concentration~~ dopant at the second angle is performed in a direction that forms an angle of between 30° and 60° with a surface normal to the upper surface of the semiconductor body or substrate.

5. (Previously Presented) The method of claim 1, wherein implanting to form the source and drain regions is performed in a direction that forms an angle of between 0° and 7° with a surface normal to the upper surface of the semiconductor body or substrate.

6. (Previously Presented) The method of claim 1, wherein etching comprises etching at least some of the semiconductor body or the substrate underneath the gate electrode.

7. (Previously Presented) The method of claim 1, wherein etching comprises removing between 20nm and 200nm of the semiconductor body or the substrate.

8. (Previously Presented) The method of claim 2, wherein implanting to form the regions of lower dopant concentration is performed in a direction that forms an angle of between 30° and 60° with a surface normal to the upper surface of the semiconductor body or substrate.

9. (Previously Presented) The method of claim 2, wherein implanting to form the source and drain regions is performed in a direction that forms an angle of between 0° and 7° with a surface normal to the upper surface of the semiconductor body or substrate.

10 and 11. (Canceled)

12. (Previously Presented) The method of claim 4, wherein implanting to form the source and drain regions is performed in a direction that forms an angle of between 0° and 7° with a surface normal to the upper surface of the semiconductor body or substrate.

13 and 14. (Canceled)

15. (Previously Presented) The method of claim 1, wherein a sloping sidewall on the source-side and a sloping sidewall on the drain side slope downward from the gate electrode at substantially same angles.

16. (Currently Amended) A method for producing a device structure, comprising:

forming a gate electrode on a gate dielectric, the gate dielectric being on an upper surface of a semiconductor;

removing at least part of the semiconductor to form sloping sidewalls adjacent to the gate electrode, the sloping sidewalls sloping downward relative to the gate electrode;

forming spacers at sides of the gate electrode and adjacent to the sloping sidewalls;

implanting dopant at a first angle relative to the upper surface of the semiconductor to form source and drain regions in the semiconductor, wherein implanting the dopant at the first angle is performed after forming the spacers; and

implanting dopant at a second angle relative to the upper surface of the semiconductor, and through the spacers, to form regions of lower dopant concentration in the semiconductor, the regions of lower dopant concentration being adjacent to a channel between the source and drain regions;

wherein the first angle is greater than the second angle.

17. (Previously Presented) The method of claim 16, wherein the sloping sidewalls are formed at angles of 30° to 60° from the upper surface of the semiconductor.

18. (Previously Presented) The method of claim 17, wherein the sloping sidewalls are formed at angles of 45° from the upper surface of the semiconductor.

19. (Currently Amended) The method of claim 16, wherein implanting ~~to form the regions of lower dopant concentration~~ at the second angle is performed in a direction that forms an angle of between 30° and 60° with a surface normal to the upper surface of the semiconductor.

20. (Previously Presented) The method of claim 16, wherein implanting to form the source and drain regions is performed in a direction that forms an angle of between 0° and 7° with a surface normal to the upper surface of the semiconductor.

21. (New) The method of claim 1, wherein implanting dopant at the second angle is performed before implanting dopant at the first angle.

22. (New) The method of claim 4, wherein implanting dopant at the second angle is performed before implanting dopant at the first angle.

23. (New) The method of claim 16, wherein implanting dopant at the second angle is performed before implanting dopant at the first angle.

24. (New) The method of claim 19, wherein implanting dopant at the second angle is performed before implanting dopant at the first angle.